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Supplementary information 2: Descriptions of affected vertebrae.

1. Eleventh thoracic vertebra (T11)

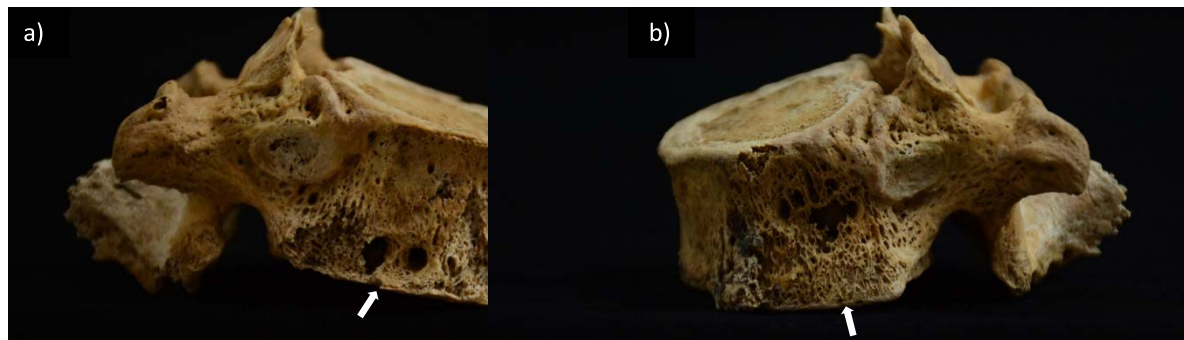


Figure S2.1. Eleventh thoracic vertebral body of individual M34-E with lytic lesions. a) right lateral view. b) left lateral view.

On the inferior sector of the right lateral aspect of the vertebral body, two round cloacae/fistulae perforated the vertebral body, measuring 3.2 mm and 2.9 mm in diameter, respectively (Fig. S2.1a). The margins of both cloacae were well-defined and remodeled, indicating a chronic condition beyond the acute stage of the disease. On the middle sector of the left lateral aspect of the vertebral body, one lytic focus perforated the vertebral body, causing localized osteoporosis (Fig. S2.1b) (Roberts and Buikstra, 2019: 326). Its jagged margin suggested an active inflammatory process active at the time of death.

2. Twelfth thoracic vertebra (T12)

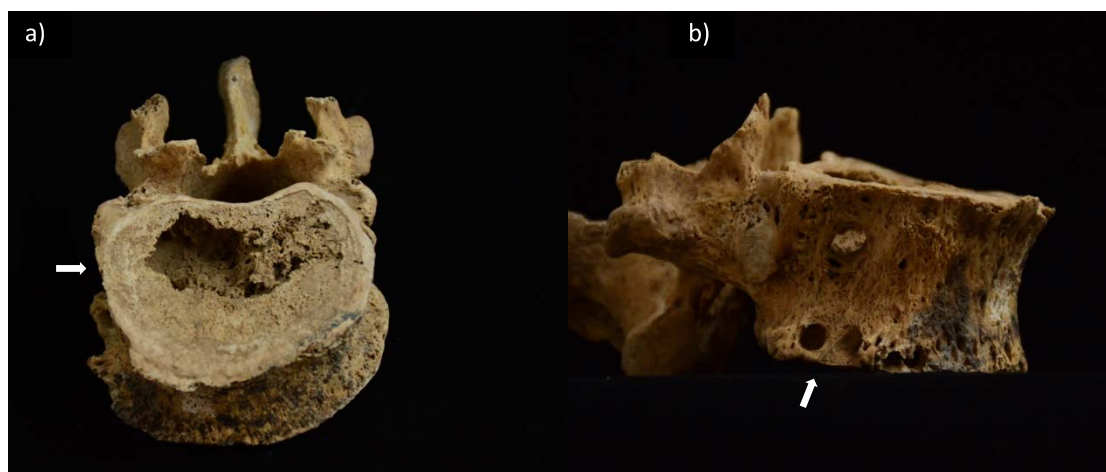


Figure S2.2. Twelfth thoracic vertebral body of individual M34-E. a) superior view showing extensive destruction of the vertebral body. b) right lateral view showing three cloacae.

Extensive bone destruction was noted on the superior aspect of the vertebral body, leading to a cavity measuring about 28.8 mm in diameter (Fig. S2.2a). Its irregular margin, showing no evidence of healing suggested that the person died in the acute stage of the disease, although post-mortem damage as a cause of the bone changes was difficult excluded. Three small round cloacae were identified on the right lateral aspect of the vertebral body, with the upper one connecting to the cavity in the vertebral body (Fig. S2.2b). The margins of all three cloacae were well-defined and remodeled, indicating chronicity for the lesions. Small osteophytes had formed along the superior edge of the right lateral aspect of the vertebral body (Fig. S2.2b).

3. First lumbar vertebra (L1)



Figure S2.3. First lumbar vertebral body of individual M34-E. a) inferior view showing extensive destruction of the vertebral body. b) right lateral view showing a bony spicule and a cloaca containing a central sequestrum. c) left lateral view showing new bone formation as bony extensions.

The inferior and posterior portions of the vertebral body were destroyed, leading to a pronounced cavity (25.6 mm in diameter) with remodeled margins (Fig. S2.3a). A cloaca (9.3 mm in diameter) containing a central sequestrum perforated the inferior sector of the right lateral aspect of the vertebral body and connected to the cavity in the vertebral body (Fig. S2.3a, b). A bony spicule bridged across this cloaca (Fig. S2.3b). On the left lateral aspect of the vertebral body, lamellar bone had formed as thick bony extensions covering a cloaca underneath (Fig. S2.3c). The remodeled margins of both cloacae indicated a chronic long-standing pathological process.

4. Second lumbar vertebra (L2)

Although the surface of the anterior vertebral body was damaged post-mortem, from anterior, superior, and right lateral views, more than half of the vertebral body was

destroyed by a pathological process, leading to a marked cavity (32.8 mm in diameter) (Fig. S2.4a, b, c). Its remodeled margin indicated a chronic condition with evidence of healing at the time of death. A cloaca, measuring 6.4 mm in diameter, was observed on the superior edge of the left lateral aspect of the vertebral body (Fig. S2.4b). New bone formed as thick shell-like bony extensions covered this cloaca (Fig. S2.4d). The cloaca and bony extensions connected to the corresponding cloaca and bony extensions on L1.

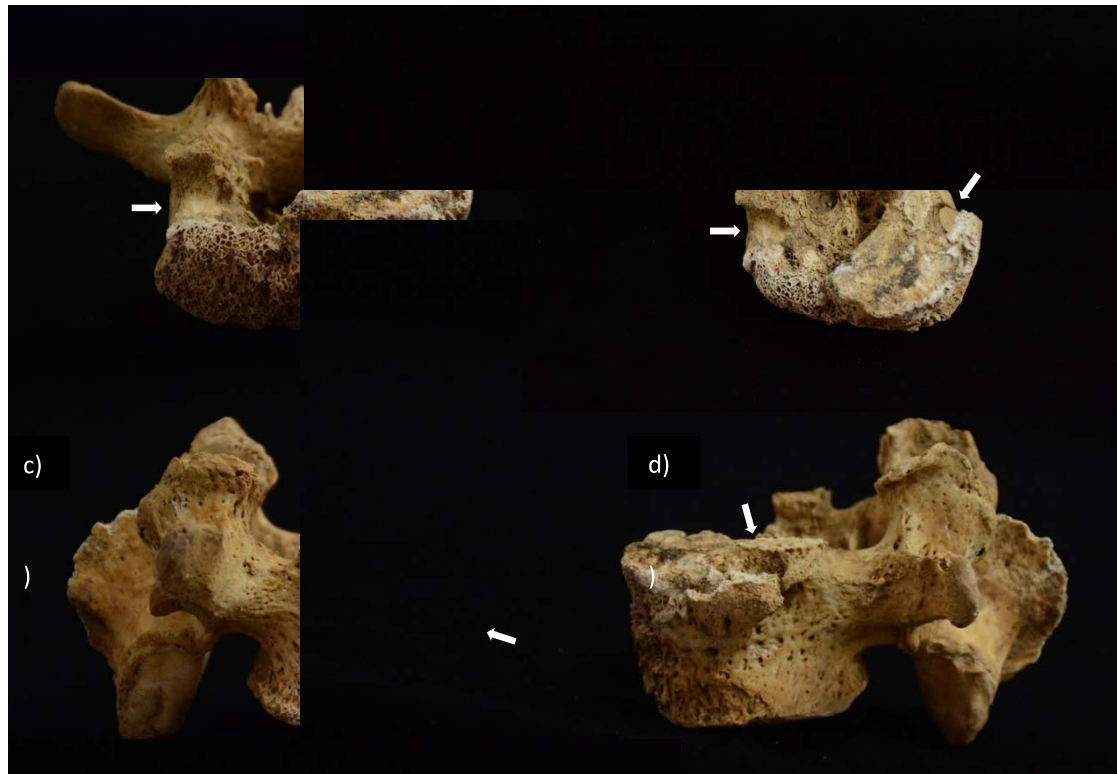


Figure S2.4. Second lumbar vertebral body of individual M34-E. a) anterior view, b) superior view, and c) right lateral view showing marked destruction of the vertebral body. d) left lateral view showing new bone formation as bony extensions.